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(71) Applicant (for all designated States except US): **STICHT-
ING GLASS FOR HEALTH** [NL/NL]; J. Van Maerlant-
laan 9, NL-2343 JX Oegstgeest (NL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **VAN DEN BOSCH,**
Willem [NL/NL]; J. Van Maerlantlaan 9, NL-2343 JX
Oegstgeest (NL). **VAN DUINEN, Raimond, Nicolaas,**
Bruno [NL/NL]; A. Kropholterstraat 17, NL-2552 XV
Den Haag (NL).

(74) Agents: **VAN WESTENBRUGGE, Andries** et al.; Ned-
erlandsch Octrooibureau, Scheveningseweg 82, P.O. Box
29720, NL-2502 LS The Hague (NL).

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(54) Title: SELF HARDENING GLASS CARBOMER COMPOSITION

(57) Abstract: The present invention relates to a self hardening glass carbomer composition obtainable by treating a fluorosilicate glass powder with: (a) a poly(dialkylsiloxane) having terminal hydroxyl groups, wherein the alkyl groups contain 1 to 4 carbon atoms, (b) an aqueous acid solution, and (c) separating the treated fluorosilicate glass powder from the aqueous acid solution. The glass carbomer compositions according to the invention have for example good toughness and strength and excellent fluoride release. In addition, the glass carbomer compositions according to the invention do not show shrinkage or expansion, an essential property for providing fillings for cavities having high strength and long durability. Moreover, the glass carbomer composition according to the present invention has a lower sensitivity towards abrasion and wear, a greater stiffness, a smoother surface, a better colourfastness, a better adherence to e.g. bone tissue and a lower water sensitivity.

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